

COMMISSION No. 24

PHOTOGRAPHIC ASTROMETRY (ASTROMETRIE PHOTOGRAPHIQUE)

Report of Meetings on 3,5 and 6 August 1988

PRESIDENT: A. Upgren

SECRETARY: J. Stein

Activities of Commission 24 at the XX General Assembly consisted of a business meeting and two scientific sessions, and a joint session with Commission 8, on matters of interest to both commissions.

Business Meeting (5 August 1988)

The President welcomed the members of the Commission and announced the appointment of J. Stein as secretary. He called for a moment of silence to honour the memory of J. Meurers and S. Vasilevskis, members of the Commission who have died since the previous General Assembly at New Delhi.

He next announced the commission election, and as a result of it the Officers and Organizing Committee members for the next triennium will be:

President: W.F. van Altena (USA)

Vice President: Ch. de Vegt (FRG)

Organizing Committee: A.N. Argue (UK), P. Brosche (FRG), R.B. Hanson (USA), P.A. Ianna (USA), D.D. Polozhentsev (USSR), C. Turon (FRANCE), A.R. Upgren (USA)

The following were confirmed as new members of the Commission admitted since the previous General Assembly: G.M. Ballabh, P.S. Bunclark, F. Crifo, J. Guibert, Hartkopf, M.J. Irwin, C. Lopez, B. McLean, A.B. Meinel, L. Nachado, J. Nunez, D. Pascu, G. Pizzichini, E. Schilbach, E.U. Vilkki, C.A. Williams and C.E. Worley. With the election of the above new members, the membership of Commission 24 is increased to 135.

After some discussion the following report of the Working Group on Parallax Standards was approved by the commission. The Commission expressed its thanks to the Working Group.

REPORT OF THE WORKING GROUP ON PARALLAX STANDARDS
TO I.A.U. COMMISSION 24

T.E. Lutz, Chairman

The Working Group on Parallax Standard Stars has begun to collect information from all observatories with active parallax programs. All programs of which we are aware are observing stars from the standards list, and at least some of the three standard fields centered on three open clusters (The Pleiades, Praesepe

and IC 4756).

The working group proposed that the standard stars be observed by HIPPARCOS. All standard stars brighter than $V = 12.0$ are in the HIPPARCOS input catalog at the present time.

During the discussion of the report, C. Dahn expressed a desire for more guidance from the Working Group on exposure levels for standard clusters and as to how long standard regions should be left on individual observing programs. Furthermore, he requested that the Working Group develop a coordinated plan for processing some of the accumulating data.

J. Russell reminded the commission that the development of her Praesepe Catalog encouraged the Working Group to establish certain clusters as standard regions. She also reported that the publication of the Praesepe Catalog has been delayed due to the discovery of a magnitude (or perhaps color) error.

K. Strand asked if his list of subdwarfs had been added to the list of parallax standards. A. Uppgren and C. Dahn advised us that many but not all of the stars on the list were being observed.

The Commission next heard and approved a brief report of the Working Group on Optical and Radio Positions followed by a report on the Working Group on Reference frames which is published elsewhere in these proceedings since it covers several commissions. The Commission expressed its thanks to all three Working Groups.

The Commission approved a resolution introduced by the sponsoring commissions of the Joint Commission Meeting (JCM-1) entitled "Toward Millisecond or Better Accuracy" held on 3 August. The resolution and the proceedings of that meeting appear elsewhere in the transactions.

Following the reports of the working groups, the Commission turned to other business. The following resolution introduced by C.H. de Vegt was approved after discussion: "Commission 24 emphasizes the urgent need to extend global position catalog work to substantially fainter magnitudes ($V = 15$ and beyond) by all available and newly developed instrumentation".

The Commission next raised the problem posed by its current name, photographic astrometry. Many members have recently expressed dissatisfaction with it, in view of CCD's and other non-photographic devices now coming into widespread astrometric use. The President read a letter from the late S. Vasilevskis urging the present name of Commission 24 be changed from "Photographic Astrometry" back to the name, "Parallaxes and Proper Motions" which applied prior to 1970. After considerable discussion, a non-binding vote for any of several possible names was taken with the result that the majority favored renaming the commission "Astrometry". No further action or implementation was taken with regard to this issue.

Scientific Meetings: (5 August)

The scientific meetings of 5 August covered two consecutive sessions and dealt with a number of basic and fundamental star catalogues. It was opened by the President with a tribute to Alexander N. Vyssotsky on the occasion of the centennial of his birth. The meeting was dedicated to his memory, as will be its proceedings.

The first session was chaired by W. van Altena and the second by C.A. Murray. The following papers were presented:

- W. Gliese and H. Jahreiss: "The Third Catalog of Nearby Stars. I. General View and Content"
- H. Jahreiss and W. Gliese: "The Third Catalog of Nearby Stars. II. Applied Methods and Use"
- A. Upgren and E. Weis: "The Vyssotsky Stars - A Centennial Summary"
- S. Roeser and U. Bastian: "A New Star Catalog of SAO Type"
- J. Stock and C. Abad: "The Unification of Astrometric Catalogs"
- Ch. de Vegt, M. Zacharias, A. Murray and M. Penston: "CPC2 - A Progress Report"
- Ch. de Vegt: "A New Type of Astrometric Telescope for the Construction of a Global High Precision Faint Star Catalog"
- T. Corbin and S. Urban: "The Astrographic Catalog Reference Stars - the Northern Portion"
- J. Russell: "The Astrometry of the Guide Star Catalog"
- C. Turon: "The HIPPARCOS Input Catalog"
- W. van Altena: "The Yale Parallax Catalog"
- J. Dommanget: "The CCDM, an Astrometric Catalog for Double and Multiple Stars"

These papers will be edited by A. Upgren and D. Philip and published in full in a volume of proceedings dedicated to Dr. Vyssotsky and forming the eighth in the series of Contributions of the Van Vleck Observatory.

Joint Meeting of Commissions 8 and 24: "Common Interests" (6 August)

This meeting dealt with matters of common interest to the two commissions and was chaired by Y. Requieme, President of Commission 8.

A discussion was held concerning the desirability of changing the names of both commissions. The majority present appeared to favor names more in keeping with scientific goals of

the commissions, techniques used etc. No decision was made at this time. A discussion was also held on the desirability of merging the two commissions. A non-binding vote was taken among those present and showed the majority to be in opposition to a merger.

A proposal introduced by T. Corbin, chairman of Commission 8 Working Group on Star Lists, was made and duly approved that the membership of this working group be expanded to include one member of Commission 24. G. Roser was then appointed as the Commission 24 representative.

J.D. Mulholland made an appeal for the abandonment of the sexagesimal system for angular measure stressing its awkwardness in scientific computing. It was agreed that the formal position of the two commissions on this matter would be in favor of the replacement of the sexagesimal system with a system of decimal degrees.

The following scientific papers were presented at this joint meeting:

- P. Brosche: "Plate Reduction with Orthogonal Functions"
- J. Stein: "Recent Results from the Multichannel Astrometric Photometer (MAP) at Allegheny Observatory"
- J. Guibert: "Photographic Astrometry with MAMA"
- P. Ianna: "The McCormick CCD Parallax Programs"
- C. Dahn: "The HR Diagram for 57 Intrinsically Faint Stars Derived from CCD Parallaxes and Photometry"
- D. Monet: "The USNO/CalTech Program to Measure the Palomar Sky Surveys"

Other meetings involving the two commissions are discussed in the report of Commission 8 and elsewhere.